

IN THE CLAIMS:

The text of all pending claims are set forth below. Cancelled and withdrawn claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (previously amended), (cancelled), (withdrawn), (new), (previously added), (reinstated - formerly claim #), (previously reinstated), (re-presented - formerly dependent claim #) or, (previously re-presented).

Please CANCEL claim 1-11, and ADD new claims 12-31 in accordance with the following:

1-11 (cancelled)

12. (new) A method for carrying out a handover in a radio communication system, comprising:

establishing a packet switched connection from a mobile station to a first cell via a first transceiver unit, the mobile station being assigned to a first routing area in the first cell;

assigning a routing area update identifier to the connection if the mobile station moves into a second cell which is served by a second transceiver unit, and into a second routing area;

performing a handover of the packet switched connection from the first cell to the second cell;

during at least a portion of the handover, pausing an exchange of data via the packet switched connection;

after the handover, resuming the exchange of data via the packet switched connection; and

updating the routing area from the first routing area to the second routing area, after the exchange of data is resumed.

13. (new) The method in accordance with Claim 12, wherein
before the handover from the first cell to the second cell, radio resources for the packet switched connection are reserved in the second cell.

14. (new) The method in accordance with Claim 12, wherein
as soon as the connection is assigned the routing area update identifier, data packets destined for the mobile station are duplicated and provided to both the first transceiver unit and the second transceiver unit.

15. (new) The method in accordance with Claim 12, wherein after the handover, at least for a transitional period, data compression and data encryption are performed in the same manner as before the handover.

16. (new) The method in accordance with Claim 12, wherein the mobile station is assigned a first identifier for the first routing area, the mobile station is assigned the routing area update identifier for the handover to the second cell, which routing area update identifier is used until the routing area is updated, and when the routing area is updated, the mobile station is assigned a second identifier for the second routing area.

17. (new) The method in accordance with Claim 16, wherein the routing area update identifier is a temporary identifier selected from a set of identifiers reserved for switching routing areas.

18. (new) The method in accordance with Claim 16, wherein the routing area update identifier is a temporary identifier comprising the first identifier and a supplementary identifier.

19. (new) The method in accordance with Claim 16, wherein the routing area update identifier is a temporary identifier assigned by an administrator.

20. (new) The method in accordance with Claim 16, wherein the routing area update identifier is a temporary identifier assigned by an allocated Serving GPRS Support Node SGSN of the radio communication system.

21. (new) The method in accordance with Claim 12, wherein to complete the handover, a data packet is sent from the mobile station to the second transceiver unit, and after the data packet is received at the second transceiver unit, the second transceiver unit starts sending data packets to the mobile station.

22. (new) The method in accordance with Claim 13, wherein

as soon as the connection is assigned the routing area update identifier, data packets destined for the mobile station are duplicated and provided to both the first transceiver unit and the second transceiver unit.

23. (new) The method in accordance with Claim 22, wherein after the handover, at least for a transitional period, data compression and data encryption are performed in the same manner as before the handover.

24. (new) The method in accordance with Claim 23, wherein the mobile station is assigned a first identifier for the first routing area, the mobile station is assigned the routing area update identifier for the handover to the second cell, which routing area update identifier is used until the routing area is updated, and when the routing area is updated, the mobile station is assigned a second identifier for the second routing area.

25. (new) The method in accordance with Claim 24, wherein the routing area update identifier is a temporary identifier selected from a set of identifiers reserved for switching routing areas.

26. (new) The method in accordance with Claim 24, wherein the routing area update identifier is a temporary identifier comprising the first identifier and a supplementary identifier.

27. (new) The method in accordance with Claim 24, wherein the routing area update identifier is a temporary identifier assigned by an administrator.

28. (new) The method in accordance with Claim 24, wherein the routing area update identifier is a temporary identifier assigned by an allocated Serving GPRS Support Node SGSN of the radio communication system.

29. (new) The method in accordance with Claim 24, wherein to complete the handover, a data packet is sent from the mobile station to the second transceiver unit, and after the data packet is received at the second transceiver unit, the second transceiver

unit starts sending data packets to the mobile station.

30. (new) A radio communication system comprising:

- a first routing area;
- a first cell to establish a packet switched connection with a mobile station, the first cell being located in the first routing area;
- a second routing area;
- a second cell located in the second routing area;
- a first identifier device, associated with the first routing area, to assign a temporary identifier to the connection if the mobile station moves from the first cell to the second cell;
- a second identifier device, associated with the second routing area, to assign a second identifier to the connection after a handover of the connection from the first cell to the second cell, after data exchange is paused during the handover, and after data exchange is resumed when the handover is completed.

31. (new) A method for carrying out a handover in a radio communication system, comprising:

- establishing a packet switched connection from a mobile station to a first cell, the first cell being within a first routing area;
- assigning a routing area update identifier to the connection if the mobile station moves into a second cell in a second routing area;
- performing a handover of the packet switched connection from the first cell to the second cell;
- during at least a portion of the handover, pausing an exchange of data via the packet switched connection;
- after the handover, resuming the exchange of data via the packet switched connection;
- and
- updating the routing area from the first routing area to the second routing area, after the exchange of data is resumed.